

ABSTRACT OF THE DISCLOSURE

A solid-state image sensor includes a photosensitive array capturing an optical image representative of a desired scene. The photosensitive array includes photo-sensors arranged in a direction of row and a direction of column, and microlenses each causing incident light to converge to the corresponding photo-sensor. Each photo-sensor corresponds to a particular pixel included in the photosensitive array. Each photo-sensor is made up of a higher- and a lower-sensitivity photosensitive cell for photoelectrically transducing incident light to electric signal charges. Each photo-sensor includes a primary and a secondary photosensitive cell respectively having higher-sensitivity and lower-sensitivity for photoelectrically transducing the incident light. Each microlens has its optical center shifted from the center of the corresponding photo-sensor toward the center of the photosensitive array.